

## CLAIMS

1. A vehicle remote controller including a portable device (31) carried by a driver and a transceiver (11) arranged in a vehicle to output a request signal for intercommunicating with the portable device and to output a transponder driving radio wave, the vehicle remote controller being characterized in that:

the transceiver has a common antenna (14) for transmitting the request signal and the transponder driving radio wave.

2. The vehicle remote controller according to claim 1, characterized in that the transceiver outputs the request signal in at least one of a first area (A1), which is in a vehicle passenger compartment, and an area outside the vehicle passenger compartment and outputs the transponder driving radio wave in a second area (A2), which is in the vehicle passenger compartment.

3. The vehicle remote controller according to claim 2, characterized in that the first area (A1) in the vehicle passenger compartment is larger than the second area (A2) in the vehicle passenger compartment.

4. The vehicle remote controller according to claim 2 or 3, characterized in that the antenna (14) is arranged in adjacent near a center of the vehicle.

5. The vehicle remote controller according to claim 4, characterized in that the antenna (14) is arranged on a center console (3).



controller being characterized in that:

the transceiver includes a common antenna (14) for transmitting the request signal and the transponder driving radio wave to the portable device.

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9. The vehicle remote controller according to claim 8, characterized in that the transceiver outputs the request signal to at least one of a first area (A1), which is in a vehicle passenger compartment, and an area outside the vehicle passenger compartment and outputs the transponder driving radio wave to a second area (A2) in the vehicle passenger compartment.

10. The vehicle remote controller according to claim 9, characterized in that the first area (A1) in the vehicle passenger compartment is larger than the second area (A2) in the vehicle passenger compartment.

11. The vehicle remote controller according to claim 9 or 10, characterized in that the antenna (14) is arranged near a center of the vehicle.

12. The vehicle remote controller according to claim 11, characterized in that the antenna (14) is arranged on a center console.

13. The vehicle remote controller according to claim 12, characterized in that the transceiver has, within the second area of the vehicle passenger compartment, a mounting portion, on which the portable device is placed, and a detecting means, which is arranged on the mounting portion, to detect whether the portable device is placed, and when the detecting means detects that the portable device is placed on the mounting

portion, the transceiver outputs the transponder driving radio wave.

14. A transceiver of a vehicle remote controller  
5 arranged in the vehicle to output a request signal, used to  
intercommunicate with a portable device (31) carried by a  
driver, to one of a first area (A1), which is in a vehicle  
passenger compartment, and an area outside the vehicle  
passenger compartment, and to output a transponder driving  
10 radio wave to a second area (A2) in the vehicle passenger  
compartment, the transceiver being characterized by:

a common antenna (14) for transmitting the request  
signal and the transponder driving radio wave.